AMENDMENTS IN CLAIMS

[Received by the International Bureau on April 27, 2004 (27.04.04); Originally Filed Claims 1 and 4 are amended; Claim 6 is deleted. others are not amended.

1. (Amended) A method for manufacturing rubber parts monolithically combined with a substrate at precise positions on said substrate comprising:

a placing step to place said substrate in a lower die of a die assembly comprising an upper die and said lower die for molding rubber parts;

a molding step to mold said rubber parts by casting unvulcanized rubber material into said die assembly in which said substrate is placed;

a releasing step to take said molded unvulcanized rubber parts monolithically combined with said substrate out of said die assembly; and

a vulcanizing step to vulcanize said unvulcanized rubber parts monolithically combined with said substrate taken out of said die assembly in the precious step without heating.

2. The method according to claim 1, wherein:

unvulcanized rubber parts are molded three-dimensionally on the surface of said substrate.

3. The method according to claim 1, wherein:

said unvulcanized rubber parts monolithically combined with said substrate are vulcanized by irradiating radioactive rays or ultraviolet rays.

4. (Amended) The method according to claim 1, wherein:

in said die assembly comprising an upper die and a lower die, cavities for the rubber material are arranged in said upper die; and a substrate region for placing said substrate is arranged in said lower die.

5. A method for manufacturing rubber parts monolithically combined with a substrate at precise positions on said substrate comprising:

a placing-molding step to place said substrate in a lower die having a substrate region in which said substrate is placed and to mold said rubber parts by casting unvulcanized rubber material into a space formed between

another lower die and an upper die;

a positioning step to place said unvulcanized molded rubber parts at desired positions on said substrate by replacing said another lower die with said lower die having said substrate region;

a releasing step to take said substrate and said unvulcanized rubber parts positioned on said substrate out of said die assembly; and

a vulcanizing step to vulcanize said unvulcanized rubber parts monolithically combined with said substrate without heating.

6. (Deleted)

7. A method for manufacturing rubber parts monolithically combined with a substrate at precise positions on said substrate comprising steps:

a placing-molding step to place said substrate in a lower die having a substrate region on which said substrate is placed and to mold said unvulcanized rubber parts by casting into a space formed between another lower die and an upper die;

a positioning step to place said unvulcanized molded rubber parts at desired positions on said substrate by replacing said another lower die with said lower die having said substrate region; and

a releasing step to take said substrate and said unvulcanized rubber parts positioned on said substrate out of said die assembly.

SUPPORTING STATEMENT UNDER ARTICLE 19(i)

Claim 1 is amended in order to specify the die assembly more clearly such that the die assembly comprises the lower die in which the substrate can be placed and the upper die in which unvulcanized rubber material can be cast. In this connection claim 4 dependent on claim 1 is amended.

Cited references JP48-22198 and JP30-9086 disclose means for vulcanizing unvulcanized rubber parts taken out of die assemblies, but do not disclose means for combining the rubber parts monolithically with substrates by placing the rubber parts on the substrates.

Cited reference JP2002-18890 discloses an arrangement capable of molding a core ball coated with elastic material by utilizing a die assembly consisting of separable two semi-spherical dies, but does not have technical features of the present invention characterized by that the die assembly comprising the lower die in which the substrate can be placed and the upper die in which unvulcanized rubber material can be cast, and molded unvulcanized rubber parts are vulcanized after taking out of the die assembly.

Cited references JP56-51346 and JP2002-137625 disclose only technical features for forming cured rubber coated layers by irradiating ultraviolet rays or radioactive rays or for vulcanizing rubber latex. These features are different from those specified in claim 1 of the present invention characterized by that unvulcanized rubber parts are monolithically combined with the substrate. In addition since claim 3 is dependent on independent claim 1, it cannot be rejected by the cited references.